



Appendix A
Marked Up Claims Pursuant To 37 CFR 1.121

RECEIVED
SEP 27 2002
TECHNOLOGY CENTER 2800

1. (Amended) A method for improving resolution of a current mode driver, where the current mode driver is operable to provide an output that falls within a predetermined range, the method comprising the steps of:
 - sensing at least one of a process condition, a voltage condition and a temperature condition;
 - adjusting a full scale current of a DAC in accordance with the sensing step; and
 - setting a current control signal based on an output of the DAC, the current control signal being applied to the current mode driver.
2. (Amended) [A] The method for improving resolution of a current mode driver as claimed in claim 1, wherein the step of adjusting the full scale current comprises the steps of:
 - generating an adjustment signal in response to the sensing step; and
 - applying the adjustment signal to the current mode driver, the adjustment signal causing the current mode driver to adjust the full scale current.
3. (Amended) [A] The method as claimed in claim 2, wherein the step of applying the adjustment signal to the current mode driver comprises applying at least one predetermined voltage to a corresponding at least one transistor switch.
4. (Amended) [A] The method for improving resolution of a current mode driver as claimed in claim 1, wherein the current control signal comprises a plurality of bits.
5. (Amended) [A] The method as claimed in claim 1, wherein the sensing step comprises determining a condition associated with a phase-locked loop.
6. (Amended) [A] The method as claimed in claim 1, wherein the sensing step comprises determining a condition associated with a delayed locked loop.

7. (Amended) [A] The method as claimed in claim 1, wherein the sensing step comprises the steps of:

applying a PVT independent current to a PVT sensitive load; and
detecting a voltage drop across the PVT sensitive load.

8. (Amended) [A] The method as claimed in claim 1, wherein the sensing step comprises the steps of :

applying a pulse in parallel to a delay line and a first plurality of latches, wherein the delay line comprises a second plurality of delay stages;
coupling an output of a subset of the plurality of delay stages to an input of a corresponding latch from the plurality of latches; and
decoding an output from the plurality of latches.

9. (Amended) [A] The method as claimed in claim 1, wherein the sensing step comprises sensing a PVT sensitive DC parameter.

10. (Amended) [A] The method as claimed in claim 1, wherein the sensing step comprises sensing a PVT sensitive AC parameter.

11. (Amended) In an [current mode] output driver that is operable to provide an output that falls within a predetermined range, wherein the output is set in accordance with a current control signal, a method of improving resolution of the [current mode] output driver, the method comprising the steps of:

applying the current control signal to cause the [current mode] output driver to sink a full scale current;

providing a PVT detector to sense a characteristic that comprises at least one of a process condition, a voltage condition and a temperature condition;

generating a full scale current adjustment signal at the PVT detector; and

applying the full scale current adjustment signal to alter the full scale current of the [current mode] output driver.

12. (Amended) [A] The method of improving resolution of an [current mode] output driver as claimed in claim 11, wherein the step of applying the full scale current adjustment signal comprises coupling the adjustment signal to a digital-to-analog converter.

13. (Amended) [A] The method of improving resolution of an [current mode] output driver as claimed in claim 12, wherein the adjustment signal is a two-bit signal and the digital-to-analog converter has at least two inputs.

14. (Amended) [A] The method of improving resolution of an [current mode] output driver as claimed in claim 12, wherein the digital-to-analog converter provides an output signal in response to the adjustment signal.

16. (Amended) [A] The method as claimed in claim 15, wherein the step of calibrating the output driver comprises deriving the second output from a signal provided directly by the output driver.

17. (Amended) [A] The method as claimed in claim 16, wherein the step of deriving the second output comprises applying the signal to a resistive divider.

18. (Amended) [A] The method as claimed in claim 16, wherein the step of deriving the second output comprises applying the signal to a transconductance stage.

19. (Amended) [A] The method as claimed in claim 16, wherein the step of deriving the second output comprises applying the signal to a switched capacitor circuit.

20. (Amended) [A] The method as claimed in claim 15, wherein the first current control signal is applied under user control.